

# Water Industry Career Map



**Build a Career from  
Middle School  
to Manager**



## WATER INDUSTRY CAREER MAP

Turn on the tap. Take a shower. Drain the tub. Have you ever thought about the people, pipes, and pumps responsible for bringing clean water into our homes and businesses and taking away the waste water? The water industry offers a range of careers—from administrative and laboratory assistants to meter readers, pumping station engineers, and construction managers. You can enter the water industry with almost any level of education, and you can work in the private or public sector. This career map shows some of the career tracks available in the industry, and it shows how you can advance in that track with additional experience or education. You can also use the skills gained in the industry to move to other careers in government or the private sector.

## MIDDLE AND HIGH SCHOOL ACTIVITIES

It is never too early to start planning for a career. Here are some activities that young people can participate in while in middle school and high school to set themselves up for a more successful entry into the workforce.

- Career exploration speakers
- Career fairs
- Career and Technology Education (CTE) high school programs (check with middle school counselors about entrance criteria for these programs)
- Internships
- Job coaching
- Job readiness workshops
- Job shadowing
- Mentoring programs
- Pre-apprenticeships
- School clubs, sports teams, and service learning projects to identify interests and develop relationships with adults
- Volunteer opportunities at community or faith-based organizations
- YouthWorks/other summer jobs



## ON-THE-JOB TRAINING

### Baltimore City Joint Apprenticeship Program

Collaborative effort among city agencies, Office of Labor Commissioner, and local unions. Apprentices earn wages while taking part in classroom instruction and on-the-job training.

- Automotive Mechanic
- Electrical Mechanic
- Instrumentation Technician
- Maintenance Technician
- Operations Technician
- Utilities Installer and Repairer

### YH20: Youth Water Mentoring Program

Administered by the Baltimore City Mayor's Office of Employment Development, in partnership with the Department of Public Works and Chesapeake Water Environment Association, this program provides youth age 18-24 job readiness training, worksite tours, career exploration, job shadowing, connections with career coaches, a summer job through YouthWorks. At the completion of the program, participants should be prepared to enter entry-level positions with water industry employers.

*Both programs require HS diploma or GED*

## POTENTIAL EMPLOYERS

- Baltimore City Department of Public Works
- Baltimore County Department of Public Works
- Private sector water companies
- Private sector engineering firms

Baltimore Workforce  
Development Board



MAYOR'S  
OFFICE OF  
EMPLOYMENT  
DEVELOPMENT



**INCREASING LEVEL OF EXPERIENCE OR EDUCATION NEEDED**

HS/GED	HS/GED	HS/GED/AA	HS/GED/AA/BS	BA/BS
<b>Laborer</b> <b>DUTIES:</b> Install water mains, service pipes, water meters, fire hydrant, storm drains <b>REQUIREMENTS:</b> No HS diploma/GED needed. Knowledge of hand tools <b>SALARY:</b> \$29,000-\$31,000 <i>This position can lead to jobs on lab, installation/repair, and meter reading tracks</i>	<b>Laboratory Assistant I</b> <b>DUTIES:</b> Clean and sterilize lab equipment <b>REQUIREMENTS:</b> HS diploma/GED plus one year of lab work or a course in biology, chemistry, or physics <b>SALARY:</b> \$29,300-\$31,300	<b>Laboratory Assistant II</b> <b>DUTIES:</b> Clean and sterilize lab equipment, prepare samples, perform tests <b>REQUIREMENTS:</b> AA in laboratory technology or chemical or biological sciences. One year of experience in lab work may be substituted for each year of the education requirement <b>SALARY:</b> \$31,500-\$34,200	<b>Laboratory Supervisor</b> <b>DUTIES:</b> Oversee activities of chemical and biological labs <b>REQUIREMENTS:</b> BA/BS in chemistry or biology and four years of experience in chemical or biological analysis of water <b>SALARY:</b> \$58,300-\$93,500	<b>Laboratory Technical Administrator</b> <b>DUTIES:</b> Oversee activities of chemical and biological labs <b>REQUIREMENTS:</b> BA/BS in chemistry or biology and five years of experience in chemical or biological analysis of water including three years of supervisory responsibility <b>SALARY:</b> \$77,600-\$124,100
<b>Utility Installer/Repairer I</b> <b>DUTIES:</b> Install and repair water mains, service pipes, water meters, fire hydrant, storm drains <b>REQUIREMENTS:</b> HS diploma/GED and knowledge of hand tools <b>SALARY:</b> \$29,000-\$31,000	<b>Utility Installer/Repairer II</b> <b>DUTIES:</b> Investigate complaints of water main or sewer line breaks, make repairs <b>REQUIREMENTS:</b> HS diploma/GED plus two years of experience in construction, installation, repair of water distribution or wastewater system <b>SALARY:</b> \$30,900-\$33,600	<b>Utility Installer/Repairer Supervisor I</b> <b>DUTIES:</b> Oversee and participate in the construction, installation, maintenance and repair of water distribution and waste water collection systems <b>REQUIREMENTS:</b> HS diploma/GED plus three years of experience in water distribution or collection system, including one year of lead responsibilities <b>SALARY:</b> \$33,100-\$39,200	<b>Utility Installer/Repairer Supervisor II</b> <b>DUTIES:</b> Oversee and participate in the construction, installation, maintenance and repair of water distribution and waste water collection systems <b>REQUIREMENTS:</b> HS diploma/GED plus four years of experience in water distribution or collection system including two years of supervisory responsibilities <b>SALARY:</b> \$39,700-\$48,000	
<b>Utility Meter Reader I</b> <b>DUTIES:</b> Read and inspect water meters <b>REQUIREMENTS:</b> HS diploma/GED and ability to locate address record information <b>SALARY:</b> \$29,400-\$33,900	<b>Utility Meter Reader II</b> <b>DUTIES:</b> Lead team of meter readers <b>REQUIREMENTS:</b> HS diploma/GED and two years of experience reading water meters <b>SALARY:</b> \$31,800-\$37,600	<b>Utility Meter Supervisor</b> <b>DUTIES:</b> Oversee activities of subordinates obtaining water consumption readings from meters for residential, commercial, or industrial consumers <b>REQUIREMENTS:</b> HS diploma/GED plus four years of meter reading experience, including two with lead responsibilities <b>SALARY:</b> \$35,200-\$42,000	<b>Utility Meter Reader Superintendent</b> <b>DUTIES:</b> Plan and coordinate water meter reading program <b>REQUIREMENTS:</b> AA and five years of experience in water meter reading work, plus three years of supervisory responsibilities <b>SALARY:</b> \$58,300-\$93,500	
<b>Inspections Trainee</b> <b>DUTIES:</b> Receive training in inspection practices in a construction or code enforcement field <b>REQUIREMENTS:</b> HS diploma/GED <b>SALARY:</b> \$27,600-\$31,000	<b>Water Service Inspector</b> <b>DUTIES:</b> Visit construction sites to inspect the installation and placement of water supply services <b>REQUIREMENTS:</b> HS diploma/GED and two years in the inspection or repair of water supply service <b>SALARY:</b> \$30,300-\$34,900	<b>Public Works Inspector I</b> <b>DUTIES:</b> Inspect work of contractors on highway, street, bridge, conduits, water and waste water systems facilities or other minor construction projects <b>REQUIREMENTS:</b> HS diploma/GED and three years of experience in performing construction inspection work <b>SALARY:</b> \$36,300-\$43,300	<b>Public Works Inspector II</b> <b>DUTIES:</b> Perform on-site inspections of highway, street, bridge, water and waste water systems facilities <b>REQUIREMENTS:</b> HS diploma/GED and four years of experience in performing construction inspection <b>SALARY:</b> \$40,500-\$49,000	<b>Construction Project Supervisor</b> <b>DUTIES:</b> Oversee scheduling and inspection of major construction projects and supervise inspections personnel <b>REQUIREMENTS:</b> BA/BS and three years of experience in inspection, or an equivalent combination of education and experience <b>SALARY:</b> \$59,500-\$95,400



**INCREASING LEVEL OF EXPERIENCE OR EDUCATION NEEDED**

HS/GED	HS/GED	HS/GED	HS/GED	AA/BA/BS
<b>Utility Meter Technician I</b> <b>DUTIES:</b> Learn to perform routine manual labor tasks related to water distribution activities for residential properties <b>REQUIREMENTS:</b> HS diploma/GED <b>SALARY:</b> \$30,300-\$34,900	<b>Utility Meter Technician II</b> <b>DUTIES:</b> Perform routine manual labor tasks related to water distribution activities for residential properties <b>REQUIREMENTS:</b> HS diploma/GED plus one year as an Utility Meter Technician I or two years of relevant experience <b>SALARY:</b> \$33,800-\$40,000	<b>Utility Meter Technician III</b> <b>DUTIES:</b> Perform water reading, maintenance, repair, testing, and other water service activities <b>REQUIREMENTS:</b> HS diploma/GED plus two years as a Meter Technician or three years of relevant experience <b>SALARY:</b> \$34,500-\$40,800	<b>Utility Meter Supervisor</b> <b>DUTIES:</b> Oversee the activities of subordinates engaged in the reading, repair, and maintenance of water meters and the resolution of metered water customer service requests <b>REQUIREMENTS:</b> HS diploma/GED plus three years as a Meter Technician or four years of relevant experience <b>SALARY:</b> \$37,400-\$45,000	<b>Utility Meter Field Operations Manager</b> <b>DUTIES:</b> Oversee field operations involving water meter maintenance, installation, and measurement <b>REQUIREMENTS:</b> BA/BS plus four years of experience in industry <b>SALARY:</b> \$72,400-\$115,800
<b>Operations Tech Apprentice</b> <b>DUTIES:</b> Receive classroom and on-the-job training in the operation, maintenance, and minor repair of mechanical and electrical equipment in a water or wastewater treatment plant <b>REQUIREMENTS:</b> HS diploma/GED <b>SALARY:</b> \$33,000-\$36,600	<b>Water Treatment Technician II</b> <b>DUTIES:</b> Operate filters, chlorinators, dry chemical feeders, and other mechanical and electrical equipment in a water treatment plant <b>REQUIREMENTS:</b> HS diploma/GED plus three years of experience or completion of the Operations Tech apprenticeship program <b>SALARY:</b> \$36,100-\$40,600	<b>Water Treatment Technician III</b> <b>DUTIES:</b> Operate filters, chlorinators, dry chemical feeders, and other mechanical and electrical equipment in a water treatment plant or remote stations and give instructions to lower level technicians <b>REQUIREMENTS:</b> HS diploma/GED plus four years of experience in the field <b>SALARY:</b> \$40,000-\$45,600	<b>Water Treatment Technician Supervisor</b> <b>DUTIES:</b> Oversee the operation of a filtration plant and secondary treatment stations. Supervise operations technicians <b>REQUIREMENTS:</b> HS diploma/GED plus five years of experience in the field <b>SALARY:</b> \$42,200-\$51,000	<b>Water Treatment Assistant Manager</b> <b>DUTIES:</b> Participate in planning, coordinating, and directing the operation/maintenance of water treatment plants <b>REQUIREMENTS:</b> BA/BS plus four years of experience in water treatment plant operation <b>SALARY:</b> \$67,200-\$107,400
<b>Operations Tech Apprentice</b> <b>DUTIES:</b> Receive classroom and on-the-job training in the operation, maintenance, and minor repair of mechanical and electrical equipment in a water or wastewater treatment plant <b>REQUIREMENTS:</b> HS diploma/GED <b>SALARY:</b> \$33,000-\$36,600	<b>Waste Water Operations Technician II</b> <b>DUTIES:</b> Operate and inspect pumps, valves, bar screens, and other waste water pumping station equipment <b>REQUIREMENTS:</b> HS diploma/GED plus three years of experience or completion of the City's waste water apprenticeship program <b>SALARY:</b> \$36,100-\$40,600	<b>Waste Water Technician Supervisor I</b> <b>DUTIES:</b> Supervise and participate in the operation and inspection of pumps, valves, bar screens, and other waste water pumping station equipment <b>REQUIREMENTS:</b> HS diploma/GED plus four years of experience in the field <b>SALARY:</b> \$40,500-\$49,000	<b>Waste Water Technician Supervisor II</b> <b>DUTIES:</b> Oversee the operation of an area of a waste water treatment plant and may supervise shift supervisors <b>REQUIREMENTS:</b> HS diploma/GED plus five years of experience in the field <b>SALARY:</b> \$45,800-\$55,600	<b>Waste Water Plant Operations Supervisor</b> <b>DUTIES:</b> Oversee and coordinate the operation and maintenance of a wastewater treatment plant and participate in the overall planning and direction of plant activities <b>REQUIREMENTS:</b> AA plus four years of experience in the field <b>SALARY:</b> \$67,200-\$107,400
<b>Operations Tech Apprentice</b> <b>DUTIES:</b> Receive classroom and on-the-job training in the operation, maintenance, and minor repair of mechanical and electrical equipment in a water or wastewater treatment plant <b>REQUIREMENTS:</b> HS diploma/GED <b>SALARY:</b> \$33,000-\$36,600	<b>Pumping Technician II</b> <b>DUTIES:</b> Operate, inspect, and clean pumps, valves, bar screens, and other related equipment <b>REQUIREMENTS:</b> HS diploma/GED plus three years of experience or completion of the City's water pumping apprenticeship program <b>SALARY:</b> \$36,100-\$40,600	<b>Pumping Technician III</b> <b>DUTIES:</b> Operate and inspect pumps, valves, bar screens, and other related equipment and provide work direction to lower level technicians <b>REQUIREMENTS:</b> HS diploma/GED plus four years of experience <b>SALARY:</b> \$40,000-\$45,600	<b>Pumping Technician Supervisor</b> <b>DUTIES:</b> Oversee the operation, inspection, and minor maintenance of water pumping equipment <b>REQUIREMENTS:</b> HS diploma/GED plus five years of experience <b>SALARY:</b> \$42,200-\$51,000	<b>Water Systems Pumping Supervisor</b> <b>DUTIES:</b> Coordinate the operational activities of water pumping stations and control centers and oversee the work of shift supervisors <b>REQUIREMENTS:</b> AA plus four years of experience <b>SALARY:</b> \$55,300-\$88,500

**Source:** Baltimore City Department of Human Resources, March 2018: <https://humanresources.baltimorecity.gov/employment/>  
**Salary ranges rounded to the nearest \$100.**